Final Determination

Riparian PFC Assessment Form - Texas For Perennial and Seasonal Creeks and Rivers

Segment or Reach:

Describe Potential Channel Type and Plant Communities:

Creek Name:

Team Members:

Yes No NA

A riparian area in Proper Functioning Condition will have adequate vegetation, landform or large woody debris to:

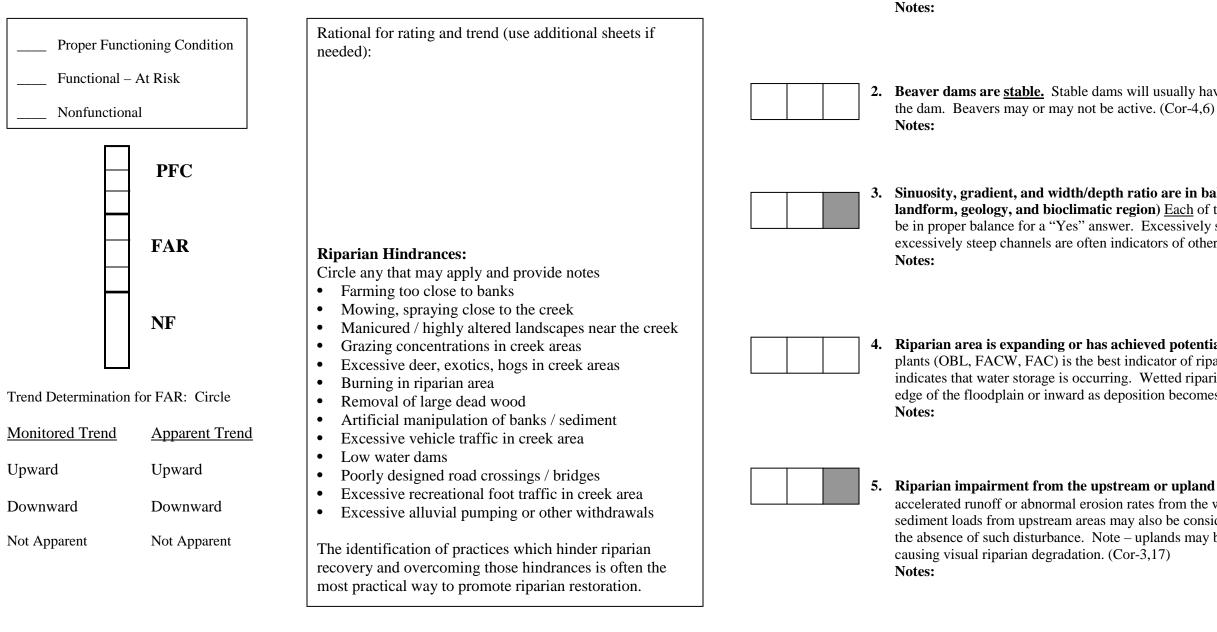
- Dissipate stream energy during high flow
- Reduce erosion
- Stabilize channel and banks
- Trap sediment and capture bedload
- Develop floodplains
- Provide floodwater retention
- Provide water storage and aquifer recharge

(In accordance with the potential for the riparian area / stream)

PFC (Proper Functioning Condition) describes a state of resiliency that allows a riparian area to hold together during 10 to 20 year high flow events with a high degree of reliability. A riparian area in PFC will meet the definition above.

FAR (Functional – At Risk) describes a riparian area that meets some or even most of the elements in the definition above, but has a high probability of degradation and damage during a 10 to 20 year high flow event.

NF (Non Functional) describes a riparian area that clearly lacks the elements in the definition above. There will often be a majority of "No" answers on the checklist; however there will often be several "Yes" answers.



 Date:	

Hydrology Assessment Items

1. Floodplain is inundated in "relatively frequent" events (at least every 1 - 3 years on average). Frequent flood access to floodplain indicates the capacity for energy dissipation, water storage, and aquifer recharge. (Cor-13,16)

2. Beaver dams are stable. Stable dams will usually have live woody vegetation growing in

3. Sinuosity, gradient, and width/depth ratio are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) Each of the three channel characteristics must be in proper balance for a "Yes" answer. Excessively straight, excessively wide or excessively steep channels are often indicators of other underlying problems. (Cor-1,16,17)

Riparian area is expanding or has achieved potential extent The presence of wetland plants (OBL, FACW, FAC) is the best indicator of riparian width. A wide riparian area indicates that water storage is occurring. Wetted riparian area can widen outward toward the edge of the floodplain or inward as deposition becomes vegetated. (Cor-3,7,8,13,14)

Riparian impairment from the upstream or upland watershed is absent. Grossly accelerated runoff or abnormal erosion rates from the watershed are examples. Excess sediment loads from upstream areas may also be considered here. A "Yes" answer indicates the absence of such disturbance. Note - uplands may be in poor condition and still not

Yes	No	NA		Vegetation Assessment Items	Yes	No	NA	Geomorphology A
] 6.	There is adequate diversity of stabilizing riparian vegetation for recovery/maintenance At least two different stabilizing riparian species (OBL, FACW and FAC) must be present. On streams were both woody and herbaceous vegetation is required, should have at least two species of each as minimum for allowing recovery or maintaining function. (Cor-9,11) Notes:				13. Floodplain and channel characteristics large rock, overflow channels, sinuosity, forms of channel roughness help to dissip 1,12,17) Notes:
] 7.	There are adequate age class(es)of stabilizing riparian vegetation for recovery/maintenance Young <u>and</u> middle age classes of key stabilizing riparian plants (OBL, FACW and FAC) must be present. Should include age class diversity of both woody and herbaceous species where both are important. Small current year seedlings and very old plants do not count as a qualifying age class. (Cor-12) Notes:				14. Point bars are revegetating with stabili point bars are natural erosion and deposit the process of establishing stabilizing ripa erosion and deposition. (Cor-7,11,13,14) Notes:
			8.	Species present indicate maintenance of riparian soil-moisture characteristics. Plant species rated as OBL and FACW are indicative that water table is being maintained or improving. On some seasonal creeks, FAC species may be all that can be sustained. (Cor-4) Notes:				15. Streambanks are laterally stable. Some especially on outside bends in some streat corresponding development of point bars, stable point bars, the answer would be "Noccurring at normal rates or accelerated ranks."
			9.	Stabilizing plant communities capable of withstanding moderately high streamflow events are present along the streambank. Riparian plant communities with stability rating of 6 (low gradient) and 7 (high gradient) or higher must be present in adequate amount to respond to management and allow for future recovery. (Cor-11) Notes:				16. <u>Stream system</u> is vertically stable (not in headcuts, or over steepened reaches indice Any stream with a "No"answer to this que in the past is not counted. (Cor-1,3,4,8,17) Notes:
] 10	 Riparian plants exhibit high vigor. Good vigor of riparian species is strongly related to grazing and browsing intensity, human disturbance, and maintenance of water table. (Cor-7,8) Notes: 				17. Stream is in balance with the water and (no excessive erosion or deposition is occ mid-channel bars, braided channels and u Notes:
			11	• Adequate amount of stabilizing riparian vegetation is present to protect banks and dissipate energy during moderately high flows. In general, 70% or more and up to 90% or more for low gradient-sinuous streams, of each bank should be covered by riparian plants and plant communities with good stabilizing root masses. Can include large anchored rock or wood in % cover. (Cor-1,3,6-9,11,14,15) Notes:	Ad	dition	al Com	ments:
			12	 Plant communities are an adequate source of woody material for maintenance/recovery. Where large wood is needed for maintenance or recovery, adjacent woodlands should be present to provide this wood. NA where large wood not needed. (Cor- 13) Notes: 				

gy Assessment Items

stics are adequate to dissipate energy The presence of sity, large wood, well vegetated floodplains or other issipate energy and capture and store sediment. (Cor-

abilizing riparian plants. The formation and growth of position features on some stream types. If these are in g riparian vegetation, it indicates a balance between 3,14)

Some lateral movement (cutbanks) is natural and normal, stream types. This erosion should be balanced by the bars. If the channel is widening without the formation of be "No". The intent is to determine if lateral erosion is ted rates. (Cor-3,11,15)

not incising). The presence of overfalls, active ndicates current downcutting and veritical instability. is question cannot be in PFC. Downcutting that occurred 4,8,17)

r and sediment being supplied by the drainage basin s occurring) Indicators of excessive erosion include and unstable banks. (Cor-3,5,13,15,16,17)